

## **New Record of *Horithyatira kawamurae* (Matsumura) (Lepidoptera, Thyatiridae) from Korea**

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**Abstract** *Horithyatira kawamurae* (Matsumura) (Thyatiridae, Lepidoptera) is reported for the first from Korea. Adults of *H. kawamurae* and its closely allied species, *Thyatira batis* (Linnaeus), are examined for comparison and redescription of *H. kawamurae* with the female genitalia is provided.

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**Key words** New record, Lepidoptera, Thyatiridae, Korea

### **INTRODUCTION**

The family Thyatiridae is small to medium sized moths and comprises little over 200 species (Munroe, 1982; Scoble, 1992). They occur mostly in the Palearctic and Oriental regions. The systematic position of the family is still unsettled (Inoue, 1982; Minet, 1983; Scoble, 1992). However, Scoble (1992) noted that the superfamily Drepanoidea (includes Drepaninae, Thyatirinae, and Cyclidiinae) is monophyletic based on the characteristic tympanal organs.

In Korea, 15 species of the family Thyatiridae were known (ESK and KSAE, 1994). Two thyatirid species, *Shinploca shini* Kim and *Togaria suzukiana* Matsumura, were added to the Korean fauna (Kim, 1995; Jeong *et al.*, 1995). In April 2001, I had a chance to collect a female of *H. kawamurae* (Matsumura), which is new to Korea. This addition of the species has resulted in 18 species of Thyatiridae in Korea.

The terminology of adult including the genitalia follows Scoble (1992). Material examined is now preserved in Department of Environmental Education, Mokpo National University, Korea.

### **TAXONOMY**

***Horithyatira kawamurae* (Matsumura)** 흰오뚜기무늬뽕족날개나방 (신칭)

(Figs 1, 3A)

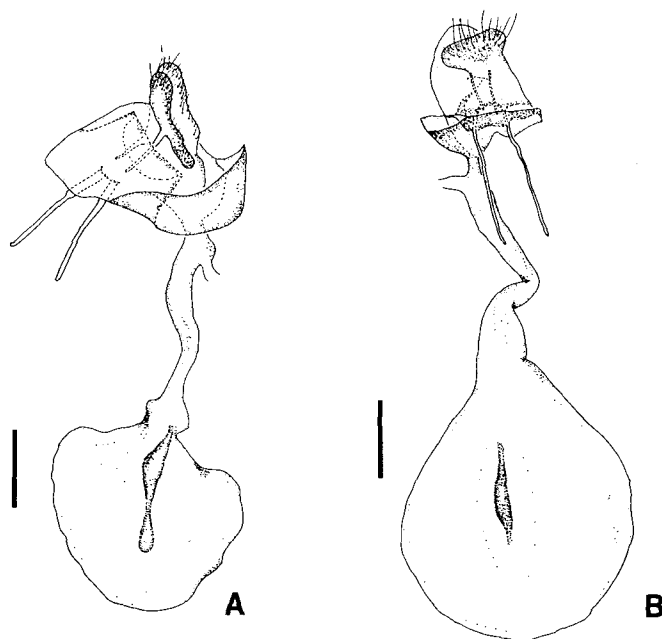
*Thyatira kawamurae* Matsumura, 1921, Thousand Insects Japan (Additam.) 4: 835, pl. 60:10

**Diagnosis.** *Horithyatira kawamurae* (Matsumura) is similar to *Thyatira batis* (Linnaeus) (figs 2, 3B) in wing markings of forewing. However, *H. kawamurae* is distinguished from *T. batis* by the additional white two dots, small one and large one on the costal area of forewing. At termen of forewing, the distinct wavy lines occur in *H. kawamurae*. In the female genitalia of *H. kawamurae*, the strongly sclerotized ovipositor, relatively long apophysis posterioris, large sterigma and sclerotized corpus bursae with the number eight-shaped signa separate this species from *T. batis*.

**Redescription** (Fig. 1). Wingspan 38 mm. Antennae of female filiform, with thick flagellomeres. Frons covered with long grey hairs. Labial palpi grey, three segmented, each segment is equal in length, first and second segments covered with grey hairs, third segment naked. Thorax covered with brown long



**Figs 1-2.** Adults. 1. *Horithyatira kawamurae* (Matsumura), wingspan 38 mm, Mt. Du-run, JN; 2. *Thyatira batis* (Linnaeus), wingspan 42 mm, Mt. Bangdae, GW.



**Fig. 3.** Female genitalia. A. *Horithyatira kawamurae* (Matsumura); B. *Thyatira batis* (Linnaeus) Scale bar = 1 mm.

hairs. Fore and midlegs femur with brown hairs, tibia distinct with white long hairs, tarsus brown with white joints. Hindleg femur and tibia with brown hairs, tarsus brown with white joints. Forewing brownish, basally distinct with three creamy white dots, medially with two white dots, postmedially a triangular creamy white dot and apically a large creamy white dot, tornus with a reddish round dot, and termen with wavy lines. Hindwing blackish, basally slightly paler. Abdomen brownish.

Female genitalia (Fig. 3A). Ovipositor broad, sclerotized. Anterior apophysis as double as posterior apophysis in length. Sterigma large, bowl-shaped. Ductus bursae long, membranous. Corpus bursae renal-shaped, with an elongate patch of signa.

*Material examined.* 1 ♀ Mt. Du-run, JN: Haenam, 2001 IV 17 (SW Choi).

*Distribution.* Korea (South), Japan.

*Remarks.* The species occurs only in spring.

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